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EXAMINER	
AHMED, MOHAMED MAHMOUD	
ART UNIT	**PAPER NUMBER**
3736	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/625,633	HUTCHINSON ET AL.	
	Examiner	Art Unit	
	Mohamed Ahmed	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-14,16,17,19-22,24-30,33,35,42,45,51,53,56,57 and 59-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-14,16,17,19-22,24-30,33,35,42,45,51,53,56,57 and 59-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-35, 45, 51, 53, 56-57 and 64-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Cairnes USPN 6,139,494. (hereinafter Cairnes 494)

1. A patient physiologic monitoring assembly comprising:

a plurality of sensors generating a real-time physiologic data stream, said real-time physiologic data stream including a plurality of physiologic variables; (col. 5 ln. 36-50, col. 6 ln. 21-36);

a first logic rule set including a plurality of logic rules for interpreting the physiologic variables; (col. 4 ln. 27-39, col. 7 ln. 55-59)

a second logic rule set including a plurality of logic rules for interpreting the physiologic variables; and (col. 4 ln. 27-39, col. 7 ln. 55-59)

a controller receiving said real-time physiologic data stream, said controller including a logic adapted to (col. 5 ln. 36-50, col. 7 ln. 55-59);

cross reference said plurality of physiologic variables with the first logic rule set and second logic rule set; and (col. 4 ln. 27-39, col. 7 ln. 55-59)

generate at least a first diagnostic interpretations of said plurality of physiologic variables utilizing said first logic rule set and a second diagnostic interpretation of said plurality of physiologic variable utilizing the said second logic rule set. (col. 4 ln. 27-39)

2. A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to display said first and second diagnostic interpretations on a display element. (col. 7 ln. 1-17)

3. A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to select said first logic rule set and said second logic rule set from a rules database, said rules database including a plurality of logic rule sets. (col. 7 ln. 53-59, col. 15 ln. 5-27, see fig. 13 element 710)

Claims 5-10 have been rejected on substantially the same basis.

11. A method for providing diagnostic aid to a clinician monitoring the medical condition of a patient, the method comprising:

storing a plurality of rule-based algorithms that can generate different diagnostic interpretations; (col. 5 ln. 36-50, col. 15 ln. 5-27)

acquiring data relating to the patient from at least one sensor; (col. 5 ln. 36-50, col. 15 ln. 5-27)

determining at least which rule-based algorithm to apply based upon the acquired data; (col. 5 ln. 36-50, col. 15 ln. 5-27)

applying at least one of the plurality of the rule-based algorithms to the acquired data; and (col. 5 ln. 36-50, col. 15 ln. 5-27)

generating a diagnostic interpretation based on the application of at least one of the plurality of rule-based algorithms to the acquired data; and displaying the diagnostic interpretation to the clinician. (col. 5 ln. 36-50, col. 15 ln. 5-27)

12. The method of claim 11, wherein determining which algorithm to apply comprises displaying a list of choices to a clinician and receiving a clinician input indicative of a selection made by the clinician. (col. 7 ln. 1-25)

13. The method of claim 11, wherein determining which rule-based algorithm to apply comprises receiving data relating to a characteristic of the patient, and selecting a rule-based algorithm to apply based on the electronic logical analysis of the received data relating to the characteristic of the patient. (col. 7 ln. 53-63, col. 8 ln. 5-27).

Claim 14 is rejected on substantially the same basis.

16. The method of claim 59, further comprising:

storing the plurality of rule based algorithms at a remote location; and (col. 5 ln. 36-50, col. 15 ln. 5-27)

transferring the rule-based algorithm that is to be applied from the remote location. (col. 6 ln. 1-20, col. 8 ln. 5-27)

Claims 17 and 19 are rejected on substantially the same basis.

20. The method of claim 19, wherein generating a response is based on applying a plurality of rule-based algorithms. (col. 9 ln. 21-28)

21. A method for diagnosing the medical condition of a patient, the method comprising:

acquiring patient data from at least one sensor coupled to the subject; (col. 5 ln. 30-50)

applying a rule set comprising plurality of rule-based algorithms to the acquired patient data: (col. 4 ln. 27-37)

generating a plurality of diagnostic interpretations of the patient data based on the application of the plurality of algorithms. (col. 4 ln. 1-20)

evaluating the plurality of diagnostic interpretations to determine the medical condition of the patient; and (col. 5 ln. 36-50, col. 15 ln. 5-27)

selecting the diagnosis of the medical condition of the patient from the plurality of diagnostic interpretations. (col. 5 ln. 36-50, col. 15 ln. 5-27)

Claim 22 is rejected n substantially the same basis.

24. The method of claim 21, wherein acquiring patient data relating to the subject comprises acquiring physiological data relating to the patient from at least one sensor coupled to the subject. (col. 5 ln. 36-50)

25. The method of claim 21, wherein acquiring patient data comprises acquiring data from a database record relating to the subject. (col. 4 ln. 1-39)

26. The method of claim 21, further comprising:

storing a plurality of rule sets, each rule set comprising a plurality of rule-based algorithms that can be used to generate different responses; and (col. 15 ln. 5-27)

determining which of rule sets to apply. (col. 15 ln. 5-27 and 53-67)

Claim 27 is rejected on substantially the same basis.

28. The method of claim 21, further comprising generating a certainty score for each of the diagnostic interpretations. (col. 9 ln. 1-8)

29. A method for monitoring the medical condition of a patient, comprising:

storing a plurality of rule-based algorithms that each produce a separate diagnostic interpretations when applied to physiological data; (col. 15 ln. 5-27 and 53-67)

acquiring physiological data from more than one sensor coupled to the patient, the sensors acquiring physiological data relating to more than one patient characteristic; (col. 5 ln. 36-50)

based on the acquired physiological data selecting a plurality of the stored rule-based algorithms; (col. 15 ln. 5-27 and 53-67)

applying the selected plurality of rule-based algorithms to the acquired physiological data; and (col. 4 ln. 21-39, col. 9 ln. 21-28)

generating a plurality of diagnostic interpretations based on the application of the data to the plurality of rule-based algorithms. (col. 4 ln. 21-39, col. 9 ln. 21-28)

30. The method of claim 29, wherein the plurality of diagnostic interpretations includes a value for at least one patient characteristic. (col. 5 ln. 30-50, col. 7 ln. 53-63)

33. A system for using rule-based algorithms, comprising:

a data storage device configured to store rule-based algorithms; and (col. 8 ln. 35-45, col. 15 ln. 7-27)

a data acquisition device configured to acquire data from a patient;

a controller that receives and processed the acquired data; (col. 5 ln. 36-50, col. 7 ln. 55-59)

a first logic configured to select a rule based algorithm from the data storage device to be applied to the acquired data; (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

a network communicatively connecting the data storage device and the controller, and a network interface configured to transfer the selected rule-based algorithms across the network, from the data storage device to the controller; and (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

a second logic configured to apply the data acquired from the patient to the selected rule-based algorithm, the selected rule-based algorithms being usable in a system configured to accept rule based algorithms written by unrelated entities. (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

wherein the controller uses the selected rule-based algorithm to produce a diagnostic interpretation. (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

35. The system of claim 33, wherein rule-based algorithms may be added or removed from the plurality of rule-based algorithms stored on the data storage device. (col. 5 ln. 36-50, col. 8 ln. 5-27)

Claims 45, 51, 53, and 56-57 are rejected on substantially the same basis.

64. A monitoring system for monitoring the medical condition of a patient, comprising:

at least one data storage device comprising a plurality of rule sets, each rule set comprising a plurality of rule-based algorithms, at least one rule-based algorithm being written by an unrelated group; (col. 4 ln. 27-39, col. 7 ln. 55-59)

a patient monitor comprising a plurality of sensors attached to the patient for collecting physiological data; (col. 4 ln. 27-39, col. 7 ln. 55-59)

a communications network connecting the at least one data storage device and the patient monitor; (col. 4 ln. 27-39, col. 7 ln. 55-59)

a user interface configured to facilitate the transfer of at least one rule set across the network; (col. 4 ln. 27-39, col. 7 ln. 55-59)

a logic configured to apply at least one rule set to the physiological data to produce at least one diagnostic interpretation. (col. 4 ln. 27-39, col. 7 ln. 55-59)

65. The system of claim 64 wherein the user interface is configured to facilitate the transfer of at least two rule sets, and the logic is configured to produce at least one diagnostic interpretation for each rule set applied to the physiological data. (col. 4 ln. 27-39, col. 7 ln. 55-59)

66. A method of monitoring a patient, comprising:

acquiring data from a plurality of sensors that are coupled to a patient;

selecting a first rule set comprising a first plurality of rule-based algorithms based on the acquired data; (col. 4 ln. 27-39, col. 7 ln. 55-59)

applying the first rule set to the acquired data to produce a first plurality of diagnostic interpretations; (col. 4 ln. 27-39, col. 7 ln. 55-59)

displaying the first plurality of diagnostic interpretations; (col. 4 ln. 27-39, col. 7 ln. 55-59)

receiving a selection of one of the plurality of diagnostic interpretations; (col. 4 ln. 27-39, col. 7 ln. 55-59)

selecting a second rule set comprising a second plurality of rule-based algorithms based on the selected diagnostic interpretations; (col. 4 ln. 27-39, col. 7 ln. 55-59)

applying the second rule set to the acquired data to produce a second plurality of diagnostic interpretations; and(col. 4 ln. 27-39, col. 7 ln. 55-59)

displaying the second plurality of diagnostic interpretations. (col. 7 ln. 1-17)

67. The method of claim 66, wherein displaying the first or second plurality of diagnostic interpretations comprises displaying a certainty score for each diagnostic interpretation of the plurality of diagnostic interpretations. (col. 4 ln. 27-39, col. 7 ln. 55-59)

Claims 33, 35, 38, 42, 45, and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Walker et al. US Patent Number 6,302,844.

33. A system for using rule-based algorithms, comprising:

a data storage device configured to store rule-based algorithms; and (col. 8 ln. 35-45, col. 15 ln. 7-27)

a data acquisition device configured to acquire data from a patient; (col. 3 ln. 9-65)

a controller that receives and processed the acquired data; (col. 3 ln. 9-65)

a first logic configured to select a rule based algorithm from the data storage device to be applied to the acquired data; (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

a network communicatively connecting the data storage device and the controller, and a network interface configured to transfer the selected rule-based algorithms across the network, from the data storage device to the controller; and (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

a second logic configured to apply the data acquired from the patient to the selected rule-based algorithm, the selected rule-based algorithms being usable in a system configured to accept rule based algorithms written by unrelated entities. (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

wherein the controller uses the selected rule-based algorithm to produce a diagnostic interpretation. (col. 5 ln. 30-65, col. 6 ln. 1-20, col. 15 ln. 5-27)

35. The system of claim 33, wherein rule-based algorithms may be added or removed from the plurality of rule-based algorithms stored on the data storage device. (col. 5 ln. 36-50, col. 8 ln. 5-27)

Claim 38 is rejected on substantially the same basis.

42. The method of claim 41, wherein the predetermined condition is payment of a fee. (col. 7 ln. 45-63, col. 20 ln. 12-26 and 56-67, col. 21 ln. 1-2, fig. 8b and 10-12)

45. The method of claim 39, wherein transferring the rule-based algorithm across a network comprises transferring the rule-based algorithm from a source outside a health care facility's network to a source related to the health care facility. (col. 21 ln. 21-26)

63. (New) A method for supplying rule-based algorithms for use in a medical monitor monitoring the condition of a patient comprising;

storing a plurality of rule-based algorithms at a plurality of data storage locations comprising a local data storage and at least one data storage, the at least one remote data storage comprising at least one data storage outside of an information network of a healthcare facility; (col. 3 ln. 9-68, col. 4 ln. 1-48)

collecting patient information', (col. 3 ln. 9-68, col. 4 ln. 1-48)

transferring at least one rule-based algorithm across a communications network connecting the plurality of data storage locations with the medical monitor if the patient information meets a predetermined condition; (col. 3 ln. 9-68, col. 4 ln. 1-48)

acquiring physiological data from at least one sensor coupled to the patient; (col. 3 ln. 9-68, col. 4 ln. 1-48)

applying the transferred rule-based algorithms to the acquired physiological data to produce at least one diagnostic interpretation. (col. 3 ln. 9-68, col. 4 ln. 1-48)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cairnes 494 as applied to claims 1-37, 39 and 43-58 above, and further in view of Walker et al. US Patent Number 6,302,844.

In regards to claim 38, Cairnes teaches a method and apparatus for sending patient information and decision support results to physicians and doctors for expert diagnosis via a tele-informatics system or networks, but fails to disclose a bill generator configured to generate a bill based on transferring of rule based algorithms. However, Walker et al, a reference synonymous with the invention of Cairnes discloses a system of offering physicians and doctors a compensation for their expert diagnosis based on their evaluation of patient information via a wireless or network device. It would have been obvious to some one of ordinary skill in the art at the time the invention was made to modify the method and apparatus of sending patient and decision support results to a physician or doctor of Cairnes, to include the bill generator of Walker et al, for

compensating said physicians or doctors for their diagnosis. Walker et al, states; "a system that allows physicians and other experts to accept or decline offers made by the system to render a diagnosis, thereby implementing a "piecework" type of compensation structure within the confines of, e.g., the medical environment Preferably, such a system minimizes or eliminates the human fallibility involved in noticing alarms and contacting experts in a timely manner . . . thus insuring the quickest possible response." (col. 7 ln. 45-63, col. 20 ln. 12-26 and 56-67, col. 21 ln. 1-2, fig. 8b and 10-12)

In regards to claim 42, Cairnes teaches a method and apparatus for sending patient information and decision support results to physicians and doctors for expert diagnosis via a tele-informatics system or networks, but fails to disclose a bill generator configured to generate a bill based on transferring of rule based algorithms. However, Walker et al, a reference synonymous with the invention of Cairnes discloses a system of offering physicians and doctors a compensation for their expert diagnosis based on their evaluation of patient information via a wireless or network device only if the compensation is accepted. It would have been obvious to some one of ordinary skill in the art at the time the invention was made to modify the method and apparatus of sending patient and decision support results to a physician or doctor of Cairnes, to include a condition that the transfer would be made only if the physicians or doctors acceptance of the patients case and the acceptance of proper compensation offered of Walker et al. Walker et al, states; "expert is then paged and offered compensation to render an expert diagnosis on the patient's condition; in the case of an expert accepting

the offer, the central server confirms the acceptance and transmits to the expert a copy of at least a portion of the patient's medical history and a description of the current pattern or data aberration so that the expert diagnosis may be rendered." (col. 7 ln. 45-63, col. 20 ln. 12-26 and 56-67, col. 21 ln. 1-2, fig. 8b and 10-12)

Response to Arguments

Applicant's arguments filed 02/20/2007 have been fully considered but they are not persuasive.

The applicant argues that the applied prior art fails to teach of an apparatus, which applies a first logic, rule set to physiological data to produce a first diagnostic interpretation of the physiological data and applies a second logic rule set to the physiological data to produce a second diagnostic interpretation of the physiological data. The examiner respectfully disagrees.

The claim is still rejected because the prior art reference discloses the aforementioned limitation. In column 4, lines 26-39, the prior art states: "retrieving medical sign and symptom data from the patient; analyzing the medical sign and symptom data of the patient according to a plurality of clinical case management rules; generating clinical case management information of the patient from the analyzing step; assigning the patient at least one therapy responsive to the generating step; sending to the patient the at least one therapy of the assigning step." Thus the prior art has the capability of performing and producing a plurality of diagnostic interpretations. The disclosure is sufficient to reject the claimed invention.

The applicant argues that the prior art fails to teach of a method of providing diagnostic aid to a clinician rather than directly to a patient. The examiner respectfully disagrees.

The method of claim 11 is still rejected because the prior art is capable of performing the specified limitation. The prior art states in column 7 lines 60-63: "decision software typically resides in work station of PHA (personal health advisor, nurse or professional in specific field). Software recommends therapies based on analysis of sign and symptom data a patient sends to PHA." Thus the clinician (PHA) diagnosis the physiological information sent from a patient and then renders a diagnosis interpretation based on received data. The disclosure is sufficient to reject the claimed invention.

The applicant argues that the prior art fails to teach of a formulation of different diagnostic interpretations and the evaluation of these different diagnostic interpretations to select a diagnosis of the patient's medical condition. The examiner respectfully disagrees.

The amended claims are still rejected because the prior art reference specifically discloses the aforementioned limitation. In column 4, lines 27-34, the prior art states: "retrieving medical sign and symptom data from the patient; analyzing the medical sign and symptom data of the patient according to a plurality of clinical case management rules; generating clinical case management information of the patient from the analyzing step; assigning the patient at least one therapy responsive to the generating step; sending to the patient the at least one therapy of the assigning step." Thus the prior art

clearly discloses the limitation. The disclosure is sufficient to reject the claimed invention.

The applicant argues that the applied prior art fails to teach of analyzing the acquired data to determine which rule-based algorithm to be used in the analysis of the data. The prior art also fails to disclose the selection of rule-based algorithms from a stored plurality of algorithms. The examiner disagrees.

In column 4, lines 27-34, the prior art states: "retrieving medical sign and symptom data from the patient; analyzing the medical sign and symptom data of the patient according to a plurality of clinical case management rules; generating clinical case management information of the patient from the analyzing step; assigning the patient at least one therapy responsive to the generating step; sending to the patient the at least one therapy of the assigning step." The disclosure is sufficient to reject the claimed invention.

The applicant argues that the applied prior art fails to teach of a certainty score for each of the diagnostic interpretations. The generation of a certainty score for each of the diagnostic interpretations aids the clinician in evaluating the diagnostic interpretations and to select the appropriate diagnosis of the patient. The examiner respectfully disagrees.

The amended claims are rejected because the prior art reference teaches the aforementioned limitation. In column 9, lines 1-8 (figure 4), the prior art teaches of adding "numerical representations" to the health providers report as to triage the medical diagnosis performed by the health provider.

The applicant argues that the prior art reference fails too teach that the rule-based algorithms are stored at a plurality of locations. The examiner disagrees.

In column 8, lines 5-11, the prior art states: "computerized therapeutics facilitate system wide prevention therapeutics so that the health care providers and PHA have available therapies conductive to each patient's needs." Thus the prior art teaches that the rule-based algorithms applied to patient data are stored at various locations and at various health providers' locations as well.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Ahmed whose telephone number is 571-272-1537. The examiner can normally be reached on Monday - Friday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mohamed Ahmed
Examiner
Art Unit 3736

March 7, 2007